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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630,024	07/31/2000	Kevin L. Farley	2479.2013-000	4041
21005	7590	10/06/2004	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			CORSARO, NICK	
		ART UNIT		PAPER NUMBER
		2684		5
DATE MAILED: 10/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/630,024	FARLEY ET AL.
Examiner	Art Unit	
Nick Corsaro	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 31 July 2000.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-31 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-31 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 31 July 2000 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because the abstract is to long. Correction is required. See MPEP § 608.01(b).
2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1-3, 10-12, 13, 14, 18-20, and 28-31, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy et al. (6,141,347) in view of Grube et al. (5,387,905).

Consider claim 1, Shaughnessy discloses a method of multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines

17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses the same one of said wireless channels is used to simultaneously send said multicast message to said plurality of multicast group members. Grube discloses the same one of said wireless channels is used to simultaneously send said multicast message to said plurality of multicast group members (see abstract lines 1-3, abstract lines 11-18, col. 1 lines 35-40, col. 1 lines 55-63, col. 4 lines 44-67, and col. 5 lines 1-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have the same one of said wireless channels used to simultaneously send said multicast message to said plurality of multicast group members, as taught by Grube, thus allowing the processing of a group transmission more efficiently, as discussed by Grube (col. 1 lines 45-48).

Consider claim 13, Shaughnessy discloses a system for multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses a base station processor having a plurality of wireless channels operable to transmit a wireless message; and a plurality of subscriber access units in communication with said base station processor over a wireless

connection and adapted to receive messages via said plurality of wireless channels (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses said base station processor is operable to receive a multicast message and simultaneously transmit said multicast message to at least one of said plurality of subscribers access units via the plurality of wireless channels (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13, see col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically access the same one of said plurality of wireless channels. Grube discloses the same one of said wireless channels is used to simultaneously send said multicast message to said plurality of multicast group members (see abstract lines 1-3, abstract lines 11-18, col. 1 lines 35-40, col. 1 lines 55-63, col. 4 lines 44-67, and col. 5 lines 1-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have the same one of said wireless channels used to simultaneously send said multicast message to said plurality of multicast group members, as taught by Grube, thus allowing the processing of a group transmission more efficiently, as discussed by Grube (col. 1 lines 45-48).

Consider claim 29, Shaughnessy discloses a computer program product having computer program code for multicasting messages in a wireless network (see col. 1 lines 9-12, col. 4 lines 62-67, and col. 5 lines 1-21, where Shaughnessy discloses a microprocessor, i.e. program

product and code, that performs the method). Shaughnessy discloses a computer program code for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses computer program code for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses computer program code for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses the same one of said wireless channels is used to simultaneously send said multicast message to said plurality of multicast group members. Grube discloses the same one of said wireless channels is used to simultaneously send said multicast message to said plurality of multicast group members (see abstract lines 1-3, abstract lines 11-18, col. 1 lines 35-40, col. 1 lines 55-63, col. 4 lines 44-67, and col. 5 lines 1-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have the same one of said wireless channels used to simultaneously send said multicast message to said plurality of multicast group

members, as taught by Grube, thus allowing the processing of a group transmission more efficiently, as discussed by Grube (col. 1 lines 45-48).

Consider claim 30, Shaughnessy discloses a computer data signal including computer program code for multicasting messages in a wireless network (see col. 1 lines 9-12, col. 4 lines 62-67, and col. 5 lines 1-21, where Shaughnessy discloses a microprocessor, i.e. program product and code, that performs the method). Shaughnessy discloses program code for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses program code for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses a program code for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses the same one of said wireless channels is used to simultaneously send said multicast message to said plurality of multicast group members. Grube discloses the same one of said wireless channels is used to simultaneously send said

multicast message to said plurality of multicast group members (see abstract lines 1-3, abstract lines 11-18, col. 1 lines 35-40, col. 1 lines 55-63, col. 4 lines 44-67, and col. 5 lines 1-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have the same one of said wireless channels used to simultaneously send said multicast message to said plurality of multicast group members, as taught by Grube, thus allowing the processing of a group transmission more efficiently, as discussed by Grube (col. 1 lines 45-48).

Consider claim 31, Shaughnessy discloses a system for multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses a means for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses a means for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses a means for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses the same one of said wireless channels is used to simultaneously send said multicast message to said plurality of multicast group members.

Grube discloses the same one of said wireless channels is used to simultaneously send said multicast message to said plurality of multicast group members (see abstract lines 1-3, abstract lines 11-18, col. 1 lines 35-40, col. 1 lines 55-63, col. 4 lines 44-67, and col. 5 lines 1-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have the same one of said wireless channels used to simultaneously send said multicast message to said plurality of multicast group members, as taught by Grube, thus allowing the processing of a group transmission more efficiently, as discussed by Grube (col. 1 lines 45-48).

Consider claim 2, 3, and 14, Shaughnessy discloses receiving said message at each of the plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25). Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses the same one of said wireless channels. Grube discloses the same one of said wireless channels (see abstract lines 1-3, abstract lines 11-18, col. 1 lines 35-40, col. 1 lines 55-63, col. 4 lines 44-67, and col. 5 lines 1-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have the same one of said wireless channels used to simultaneously send said multicast message to said plurality of multicast group members, as taught by Grube, thus allowing the processing of a group transmission more efficiently, as discussed by Grube (col. 1 lines 45-48).

Consider claims 10-12, and 18-20, Shaughnessy discloses scanning the message and parsing a group address in accordance with the group according to a protocol (see col. 1 lines 14-54, col. 3 lines 34-67, and col. 4 lines 1-18).

Consider claim 28, Shaughnessy discloses an Internet connection (see col. 3 lines 34-67).

5. Claims 5-9, 15-17, 21-24, and 26-27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy in view of Grube as applied to claims 1, 13, and 29-31, above, and further in view of Pan et al. (6,308,079).

Consider claims 5 and 21-23, Shaughnessy discloses the method and system, as modified by Grube above. Shaughnessy discloses several talk-groups forming variable sets groups, where the subsets are other groups of the first or other groups (see col. 4 lines 17-42). Shaughnessy and Grube do not specifically disclose another method of talk-groups with subsets of other groups including subsets such that some are listening groups. Pan teaches another method of talk-groups with subsets of other groups including subsets such that some are listening groups (see col. 2 lines 49-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy and Grube, and have another method of talk-groups with subsets of other groups including subsets such that some are listening groups as taught by Pan, thus allowing multiple user to simultaneously broadcast, as discussed by Pan (col. 2 lines 19-25).

Consider claims 6-9, 15-17, 26, and 27, the above combination discloses lookup and routing tables.

Consider claims 24, Shaughnessy discloses the method and system, as modified by Grube above. Shaughnessy discloses several talk-groups forming variable sets groups, where the

subsets are other groups of the first or other groups (see col. 4 lines 17-42). Shaughnessy and Grube do not specifically disclose another method of talk-groups with subsets of other groups including subsets such that some are listening groups. Pan teaches another method of talk-groups with subsets of other groups including subsets such that some are listening groups (see col. 2 lines 49-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy and Grube, and have another method of talk-groups with subsets of other groups including subsets such that some are listening groups as taught by Pan, thus allowing multiple user to simultaneously broadcast, as discussed by Pan (col. 2 lines 19-25).

6. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy in view of Grube, as applied to claims 1 above, and further in view of Raith et al. (6,385,461).

Consider claim 4 Shaughnessy, discloses the method and apparatus, as modified by Grube above. Shaughnessy further discloses a page message sent to all the group members (see col. 8 lines 20-25). Shaughnessy and Grube do not specifically disclose one page use for all members. Raith discloses a one page used for all group members (see col. 4 lines 25-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy and Grube, and use one page, as taught by Raith, thus allowing a method where terminals do not loose their opportunity to join the call, as discussed by Raith (col. 2 lines 5-11).

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy in view of Grube and Pan, as applied to claim 24, above, and further in view of Raith et al. (6,385,461).

Consider claim 25, Shaughnessy, discloses the method and apparatus, as modified by Grube and Pan above. Shaughnessy further discloses a page message sent to all the group members (see col. 8 lines 20-25). Shaughnessy, Grube, and Pan, do not specifically disclose one page use for all members. Raith discloses a one page used for all group members (see col. 4 lines 25-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, Grube and Pan, and use one page, as taught by Raith, thus allowing a method where terminals do not loose their opportunity to join the call, as discussed by Raith (col. 2 lines 5-11).

*Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(5,583,866), Vook discloses multicasting in a wireless network.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nick Corsaro whose telephone number is 703-306-5616. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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